To: Stan Kaczmarek[StanK@demaximis.com]

From: Vaughn, Stephanie

**Sent:** Wed 12/18/2013 5:07:47 PM

Subject: RE: Geotextile placement in a tidal situation

Some edits below...the site was the Tittabawasee River in Michigan.

From: Stan Kaczmarek [mailto:StanK@demaximis.com] Sent: Wednesday, December 18, 2013 11:41 AM

To: Vaughn, Stephanie

Subject: Geotextile placement in a tidal situation

Stephanie, is this a fair representation of what you related to me by phone this morning?

There was a Region 5 project in a tidal area in which geo-textile and armoring stone was successful placed. Main points:

- They too had a significant learning curve I'm not sure if there was a significant learning curve to get to this solution; the PM said their placement rate/efficiency improved quickly over time, they were able to place about 2 (15' wide) sheets/day
- ————— They used a device called a Mandrell (sp?) to slowly roll the sheets out from an excavator placed on crane mats
- •□□□□□ As they were placing the fabric, they were manually placing a layer of the armoring stone. The stone was packaged in dissolvable burlap sacks for easier placement.
- Down They left a 1 foot border edge on each side to allow sufficient overlap of sheets.
- Down They worked with the flow of water, so had to adjust as they went along.
  - What eventually ended up working was a very manual process with the near shore placement and securing of material occurring at low tide
  - They would unroll the fabric and place it on the exposed part of the area at low tide temporarily anchoring it onto the shore-
  - They would then manually carry some of the armoring stone out onto the fabric from shore and place it in ways to secure the fabric edges
  - The excavator would later finish the placement of the bulk of the armor stone
  - When it was secured in the near shore areas it made it easier to mechanically unroll and place the fabric in the deeper areas.

Please let me know if I got it right, and if I am missing anything important. Also, can you identify the site for us?
Stan
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